



DFG Fortuna

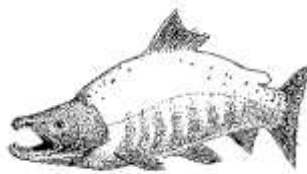
Site Handbook





Watershed Stewards Project Mission

The mission of the AmeriCorps Watershed Stewards Project is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.



Sockeye Salmon



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Placement Site Information

Department of Fish and Game Fortuna

Location 1455 J Sandy Prairie Ct.
Fortuna, CA 95540
(right next to the Fortuna CCC Center)

Agency Affiliation California Department of Fish and Game

General Ecology “The Friendly City” is located within the Eel River Valley, a flood plain devoted primarily to agriculture. The Eel River serves as a throughway for many salmonids to smaller creeks throughout the greater river system. Groves of redwoods, either protected by our parks system, or harvested by local logging companies, surround the neighboring area. Fortuna is subject to foggy and rainy coastal weather patterns, but is slightly sunnier than Eureka and Arcata!

Descriptions of Local Ecology

Climate Fortuna is located in Humboldt County, approximately 253 miles north of San Francisco. The town lies within the Eel River Valley, about 7 miles from the Pacific Ocean, and is surrounded by national, state and county redwood parks. The weather in Fortuna is typical of coastal Northern California with seasonal winter rains, coastal influenced fog, and a yearly temperature range of 47-58.

Native Plants Humboldt County is known for its redwoods. Redwoods are amazing trees. I won't even tell you why, because in your term of service, you will be able to discover why and share it with the kids. Their eyes will light up in delight and amazement- no kidding! They do things most other trees don't. Go out and discover!

Native riparian trees include Black Cottonwood, Sitka Willow, Big Leaf Maple, and Red Alder. Riparian vegetation is very important for a healthy stream and salmon habitat.

The other predominant conifer out here is Douglas Fir. Notice the “rat tails” that define their cones. You'll see these cones before you ever spot a redwood pinecone.

One can also find California Bay, Madrone, and California Hazel.

As far as shrubbery is concerned, be aware of the Poison Oak. Yes, it is out there in abundance. Three leaves, let it be! In the winter, it has no leaves, so beware of sticks pointing up out of the ground. Coyote Brush, Evergreen Huckleberry, and California Blackberry are also in abundance. You'll be able to gorge yourself in the bounty of blackberry in August and September!

Invasive Plants Not all plants are good. You'll learn this quick enough. Many ISPs will be devoted to the eradication of these and other species:

English Ivy- known to have a harmful effect on salmonid habitat. A big tree killer!
English Ivy can add so much weight to a redwood tree that it can lead to it being



toppled over in wind storms.

Scotch and French Broom- There is a difference between the brooms, but both are either yellow or orange-ish in color and both are invasive. The native broom is purple.

Holly

The infamous Himalayan Blackberry- It's not your native Blackberry. This berry bush will hurt you with its sharp thorns. Himalayan Blackberry has ridges along its stems and has leaves bunched up in fives.

Vinca (Periwinkle) - They are herbaceous, and have slender trailing stems above ground; the stems frequently take root where they touch the ground, enabling the plant to spread widely. Vinca can create a solid ground cover in redwood forests strangling out native plants.

Animals

Have you ever spotted a mountain lion? Well, this season may be your chance, if you're lucky. A few of us have spotted them randomly. No need to fear though. Mountain lion attacks are very rare- there's only one recorded case in all of Humboldt County history.

For a cool collection of native animals, visit the Weott State Parks Visitor Center.

Chances are, the first sign of an animal you'll see will be its tracks or scat. Look for evidence of:

Bobcats

Black bear

Ringtail – Very rare.

Otter

Turkey Vultures, Red Tail Hawks, Eagles, and Osprey.



Description of Site Duties

Spawner Surveys

They start at the end of November with the fall Chinook salmon run, then the fall/winter Coho run, and finally (to a much lesser degree) the Steelhead run. The Steelhead runs overlap with the end of the Coho runs, but the survey focuses are to capture Chinook and Coho populations within the stream survey reach. The data gathered is then used to help determine general salmonid fisheries management within Region 1.

Education

The Real Science Education season starts after the end of the Spawner Survey season in February. This site is very flexible when it comes to participation in as many or as little classes as you prefer (though you must meet a minimum for WSP). Mondays were kept as the only non-education day so that office work could get done. The minimum amount of education visits for 2008 was two classrooms for six Real Science visits with a teaching partner (12 visits total for a teaching team). Free time can be used to develop or modify teaching materials, create lesson plans, and go over teaching plans. This may initially seem overwhelming but is extremely rewarding and fun.

Habitat Typing

This begins the first week of June and continues straight through September and into part of October. Habitat Typing is one of the most important tasks that we are involved in at the Fortuna site. It entails recording data in Stream Habitat, a program installed on our handy PDAs, which gives the biologists a picture in time of the quality and quantity of salmon habitat within the survey reach. Paper forms (the old school method) have become somewhat obsolete this year, though some forms are still required (and it's always good to have paper as a backup- the PDAs have not been without their faults). This information is then used to produce reports that are reviewed by biologists who make recommendations for habitat improvements. The reports compare current stream conditions to reference values that would be found in an idealistic salmonid stream.

These reports are used for multiple purposes and by many other agencies and organizations than just Fortuna DFG. The California Coastal Watershed Assessment Program (CCWAP), a DFG outfit located next door, analyzes watershed assessments, which compile complete watershed overviews of different drainages in order to determine the state they are currently in. Then restoration grant projects can be developed and prioritized out of these assessments.

Other interests include land owners who possess land that surrounds various creeks, local non-profits, and the general public who have access to these reports as well. Specifically, restoration projects are regularly identified through these reports. Monitoring efforts have used old and new habitat typing data and compared it to make assessments on various developments or projects on a creek. Biological (e-fishing_ surveys are conducted after habitat typing and LWD surveys are completed. Identifying species of fish present places importance on individual creeks and their overall health. The results are further used to support the determination of future restoration projects.

Habitat Type data encompasses the largest and most extensive data set for Northern California streams that DFG has to offer. It is a well used and valuable resource. Over 80% of this data has been collected by WSP members.

Data Entry and Report Writing

This is some of the only office work involved at the site. The habitat typing data, if not already entered in the PDA while habitat typing, is entered into a computer program called Stream Habitat. Habitat Inventory Reports are produced from the data entered and are completed and edited by the producer (QA). They are then edited for



a second time to catch any remaining errors to ensure report quality. These reports are the medium that the biologists and related interest groups use when making determinations for restoration projects and needs for a particular watershed or stream. The importance of entering data correctly is critical in order to ensure that the final reports are accurate.

*Mad River
Hatchery Tours*

During the winter, WSP members serve as docents at the Mad River Hatchery for school field trips. After a brief run through of the various stations, one is able to lead a group of school students on an exciting tour of the hatchery. The Mad River Hatchery is an enhancement hatchery that produces steelhead for sport fishing. Highlights include the spawning shed and feeding the fry!

*E-Fishing
Assistance*

E-fishing occurs after a creek has been Habitat Typed. The biologists are certified to operate the heavy e-fisher pack (which looks like a Ghostbusters pack) which charges the water and draws fish and other organisms to its charge by temporarily paralyzing them. Fatality is rare, but does occur. This task, however, is completed with utmost care and is done to ensure minimum injury, stress, and fatality to stream organisms. DFG forms filled out after e-fishing are inserted into the Habitat Inventory Reports mentioned above located in the Biological Sampling section of the report. Bio Sampling serves to establish a presence/absence of species of salmonids in a particular stream.

Monitoring

Our program works closely with the Coastal Restoration Monitoring and Evaluation Project (CRMEP) which conducts monitoring to collect information to assess both the accomplishments of the FRGP and the effectiveness of the restoration activities it supports. There may be opportunities for members to work with this group on occasion. Monitoring season starts in May, increases significantly in June, and ends in November. Work takes place throughout Northern California and its various watersheds.

Monitoring is conducted on a variety of restoration project types, such as: road decommissioning/upgrading, in stream habitat enhancement, fish passage, fish screening of diversions, vegetation control, re-vegetation, etc. Office work for monitoring consists of: assembling grant information and creating new grant evaluation files downloading photos, creating photo CD's and contact sheets, downloading GPS waypoints and tracks and creating topographic maps of the project location, organizing files/data sheets of monitored projects, and entering data into the California Habitat Restoration Project Database (CHRPD), update monitoring documents/data sheets.



WSP Member Duties

The WSP member will assist the Coastal Restoration Monitoring and Evaluation Program (CRMEP) in conducting monitoring to assess both the accomplishments of the Fisheries Restoration Grants Program (FRGP) and the effectiveness of the restoration activities it supports.

Restoration projects implement physical treatments to construct features intended to interact with the environment to help conserve or improve anadromous salmonid inland habitat.

The CRMEP conducts and supports three types of restoration project monitoring: implementation, effectiveness, and validation. Implementation and effectiveness monitoring are primarily project-feature specific, i.e. individual projects are selected and the features constructed are monitored to assess how well they were implemented and how effective they are in meeting their intended habitat objectives. Validation monitoring is intended to assess whether hypothesized responses of habitat, watershed processes, and/or fish populations to watershed restoration efforts are correct. At this time CRMEP focuses primarily on Implementation and Effectiveness monitoring.

Field Duties: Conduct pre- and post-treatment effectiveness monitoring of watershed restoration projects, assist DFG grant managers in implementation monitoring of watershed restoration projects, and assist with field testing of qualitative and quantitative effectiveness monitoring protocols. Monitoring of projects occurs in Northern California, from San Francisco to Crescent City, in DFG Regions 1-3. Anyone interested in applying for this position must be willing to travel all over Northern California for up to four nights in a row.

Office Duties: Enter data into the California Habitat Restoration Project Database (CHRPD), assist with training of Qualitative Effectiveness Monitoring Protocols for DFG grant managers and restoration practitioners; assemble grant information and create project evaluation files; download GPS waypoints and tracks and create lists of waypoints and tracks for project files, create topographic maps containing GPS waypoints & tracks of project locations, and create photo CDs and contact sheets for files.

Members will also be able to participate in the above-mentioned habitat and biological surveys.

Time members spend on each of the following tasks at their site:
(WSP trainings and mandatory events not included in this breakdown)

Field work = 55%

Office work = 30%

Education = 10%

Outreach = 5%


Monitoring Calendar of Events at DFG Fortuna for Year 17

| <i>Month</i> | <i>Name of Event</i> | <i>Short Description</i> |
|--------------|-----------------------------------|---|
| October | | Month consists primarily of orientation/trainings, as well as some outreach and habitat typing. |
| | Hatchery Tour Training | |
| | Minimal Habitat Typing | |
| | Hatchery Tours | |
| November | QA & QC Implementation Monitoring | Review implementation monitoring checklists for errors. Enter data from field season into the CHRPD database. Beginning of Spawner Survey season. |
| | Data Entry CHRPD | |
| | Ongoing CRMEP Projects | |
| | ISP Prep | |
| | Spawner Survey Training | |
| | Minimal Spawner Surveys | |
| December | Spawner Surveys | Spawner Surveys Continue |
| January | Spawner Surveys | Spawner Surveys Continue |
| | | |
| | | |
| February | Minimal Spawner Surveys | Month consists of a variety of projects and learning opportunities. Many members have ISP prep to work on. Work at HFAC Greenhouse is consistent at the end of the week. |
| | | |
| | HFAC Greenhouse (1 day/week) | |
| | WSP Regional Training | |
| | Data Entry CHRPD | |
| | ISP Prep | |
| March | Real Science | Monitoring field season fully begins with Pre-treatment Effectiveness Monitoring. ATV training provided to randomly selected WSP members. WSP Spring Training provided learning opportunities by lectures/tours from local experts. Some habitat typing conducted. |
| | ISP's to be finished by June 1 | |
| | SRF Conference | |
| | HFAC Greenhouse | |
| | Data Entry CHRPD | |
| | Monitoring Field Season Prep | |
| April | Real Science | Real Science Continues. CRMEP projects consist of editing various documents and manuals, improving checklists, and finalizing the CHRPD database. An overview of the Fisheries Restoration Grants Program is given. |
| | Monitoring Field Season Prep | |
| | CRMEP Projects | |
| | FRGP Overview | |
| May | Real Science | Real Science Continues. Fish releases for the Salmon in the Classroom Program were done at the Mad River Hatchery. Biologists train WSP on Habitat Typing. Creek Days Environmental Education Fair provides learning opportunities for local schools. DFG take a kid fishing day outreach event at Freshwater Lagoon. Work at HFAC Greenhouse ends. |
| | Fish Releases | |
| | Habitat Typing Training | |
| | Creek Days | |
| | Take a Kid Fishing Day | |
| | HFAC Greenhouse | |
| June | Monitoring | Monitoring field season fully begins with Pre-treatment Effectiveness Monitoring. Fish Releases Continue. |
| | Fish Releases | |



| | | |
|--------|--|--|
| | WSP Spring Training | ATV training provided to randomly selected WSP members. WSP Spring Training provided learning opportunities by lectures/tours from local experts. Some habitat typing conducted. |
| | Habitat Typing begins | |
| July | Habitat Typing | Monitoring continues (Pre/Post-treatment Effectiveness Monitoring). A majority of the Habitat Typing is done this month. |
| | Monitoring | |
| August | Monitoring | Monitoring continues (Pre/Post-treatment Effectiveness Monitoring). Some habitat typing and E-Fishing conducted. End of Term |
| | QA & QC Implementation Monitoring Data Entry CHRPD Ongoing CRMEP Projects | |



WSP Member Information

Education Notes

| | |
|---|---|
| <i>Getting Started</i> | Our site requires us to complete our Real Science education by June 1 so that we can be dedicated to our site duties during the field season. Getting your education completed in a timely manner enables you to participate in other activities that this site has to offer. It is imperative that you schedule your teaching days wisely, trying to consolidate education duties to a few days a week (i.e. teaching on Tuesdays and Thursdays versus everyday of the week). |
| <i>The Minimum</i> | If you are teaching with a partner, you are required to visit a minimum of two classes 6 times each (a total of 12 visits). You'll have plenty of time to visit many more classes however. |
| <i>Set Up a Meeting w/ the Teacher – A 6-Week Education Outline</i> | Be prepared before meeting your teacher for the first time. What do you want to teach the kids? What's your intended curriculum for the entirety of your Real Science visits? Having a 6-Week Education Outline prepared prior to your first teaching visit is a great tool and shows the teacher that you are prepared. It also enables them to give you feedback. Their students may have already had the curriculum you are intending on teaching, etc. This way, you can sit down with the teacher, receive feedback, and modify your lesson plans according to the teacher's needs before going into the classroom. Don't forget to give the teacher the Pre-Tests! Get your Teacher Contract signed as well. |
| <i>Your Education Team Leader</i> | If you're having any difficulties or need any help whatsoever, be sure to reach out to your Education Team Leader. That's what he/she is there for. Teaching ideas, managing time and classes, or having communication issues with a teacher or school? Your education team leader is an asset and resource for all WSP members! |
| <i>The Education Handbook</i> | Refer to your Education Handbook-- there are great ideas and lots of info. This will help you prepare your lesson plan. If it doesn't have something you want, create your own worksheet, game, or presentation. Lots of fun! |
| <i>Teaching</i> | If you're new to teaching, no sweat! You can do it! Kids are awesome and though you will feel exhausted after teaching a single 1 hour class, you will be surprised by all the things you learned from your students. And you thought you were teaching them! |
| <i>Wrapping Up</i> | Make your last Real Science visit fun, but don't forget to administer Post-Tests. Check the website for post-Education forms to be filled out. |

Site / Region Specific Education Resources

| | |
|---------------------------|--|
| <i>The WSP Office</i> | It's next door. |
| <i>The World Wide Web</i> | There are quite a few cool salmon related sites that will help supplement your education ideas: http://www.fws.gov/pacific/publications/salmbnk.pdf http://www.salmonnation.com/ http://www.thinksalmon.com/ |



ISPs and Outreach Events

ISP Information

Getting Started

Our site requires us to complete our ISPs by June 1, so that we can be dedicated to our site duties during the intensive field season. It's also beneficial to complete your ISP by that date because HSU students will be around and are often a great source for volunteers. The Watershed Stewards Website has a great checklist for everything you need to do (all the forms, paperwork, and procedures). The best thing to do is talk to your mentor. He or she may already have some contacts and project ideas. In the least, an idea may be sparked. HFAC (Humboldt Fish Action Council) has proven to be a reliable resource for ISP opportunities, but don't feel that you have to do one of their projects. Get creative: Are there any community watershed needs that you see need to be addressed? How about a student restoration field-trip? There are some awesome projects out there to be done.

*Media Phone
Lists, Check
Lists, Volunteer
Forms, Liability
Forms, Etc.*

www.watershedstewards.com

Lots of info and everything you need. There are minimum requirements for an ISP. See your current member handbook or the website for your year's requirements.

After Your ISP

Well, you finished your ISP. Feel relieved, rewarded, accomplished? Don't forget- there's more paperwork to do. You're not quite done yet! Check the website for forms.

Outreach Information

Various –

*Talk to your
Outreach Team
Leader!*

There are many outreach opportunities available throughout the year. Hatchery Tours, Highway Cleanups, additional education visits, boothing at events, fish prints, etc. are all possibilities. Fortunately, in this area, there's a lot going on so you have plenty of opportunities for outreach hours. Have any ideas? Talk to your Outreach Team Leader. Have some outside interests that you would like to combine with WSP? Talk to your Outreach Team Leader. For example, providing outreach watershed classes to Backcountry Trail Crews from the CCC was a creative and successful outreach idea that bridged two awesome AmeriCorps programs. Got an idea? Get approval and then you're golden!



Housing and Local Resources

Housing Contact List

Location, location, location Affordable housing on an AmeriCorps living stipend is totally doable. Arcata, on general, is more expensive than Eureka and other areas. Arcata and Eureka are popular towns and provide city-like amenities for the area. More rural towns in the area include Rio Dell, Fortuna, Ferndale, and McKinleyville. There will be a lot of other WSP'ers looking for housing in the area. In the past, lots of people have been able to team up, share a place, and commute one big WSP family style.

Humboldt Craigslist <http://humboldt.craigslist.org/>
This is probably your best bet.

Tri-City Weekly Times-Standard www.tricityweekly.com
<http://www.times-standard.com/>

Arcata and Eureka Co-Op Bulletin Board Look for flyers for housing posted on these nifty boards.

Local Property Management Agencies Humboldt Property Management: (707) 825-1515 located at 954 H St. in Arcata

Professional Property Management: (707) 444-9197 located at 3109 H St. in Eureka

Rupp and Associates: (707) 443-7091 located at 1010 7th St. in Eureka

Local Resource Contacts

The North Coast Journal Walk yourself into any coffee shop and grab yourself a free copy: local happenings, culture, entertainment, events, resources, classes, articles galore.

<http://www.northcoastjournal.com/>

Fortuna Chamber of Commerce <http://chamber.sunnyfortuna.com/>

The California Welcome Center in Arcata Tons of free publications including the awesome “100 Things To Do In Humboldt County” book

1635 Heindon Road
Arcata, CA 95521
(707) 822-3619

College of the Redwoods <http://www.redwoods.cc.ca.us/>

Community Contacts

Community Contacts List

California Conservation Corps

The Fortuna Center is right next door. <http://ccc.ca.gov/>

California State
Parks <http://parks.ca.gov/>

*Friends of the
Eel River* <http://www.eelriver.org/>

Entertainment and Community Events

Resources for Affordable Entertainment Options

The North Coast Journal <http://www.northcoastjournal.com/>

Arcata and Eureka, though they are “big” small towns in a rural county, are culturally rich with a flourishing artist community and music scene. Get out and explore. There’s a ton to do and see, really!

Recurring Event List

The North Coast Journal <http://www.northcoastjournal.com/>

There are many annual festivals in Humboldt. Ask locals or keep your eye on the North Coast Journal for listings. There are opportunities to volunteer and table for free or reduced admissions to festivals.

Arts Alive
Eureka & Arcata Eureka Arts Alive: First Saturday of each month

Arcata Arts Alive: Second Friday of each month

Free food, drinks, art, music.

Farmer's Markets Various towns have local farmer's markets. Arcata's Farmer's Market is on Saturdays from April to November. Fortuna's Farmer's Market is on Tuesdays from May to October.



Attachments

Contact Lists

Ed Logs & Information

ISP Logs & Information

Outreach Summaries & Information

Site Protocols & Information

Site Forms



Example Checklist: IN Implementation

IN - INSTREAM HABITAT RESTORATION

IMPLEMENTATION

Contract #: P0610001

Contract name: Pleasant Creek Instream Habitat Restoration Project

Date : 03/08/07 Evaluator: B.B. McVeigh Site name: 7256489 Pleasant Ck Instream page 1 of 2

| | | Project Feature Number | 1 | 2 | 3 |
|----------------|--|------------------------|----------|----------|----------|
| | | Feature Type Code | 335 | 333 | 335 |
| Required | 1. Was the length of channel treated the same as approved? | | Y | Y | Y |
| | a. Actual length of feature: (ft) (note if length includes habitat modification) | | 12 | 5 | 18 |
| | b. Area of the feature installed within bankfull channel: (ft ²) | | 120 | 30 | 150 |
| | c. Length of aquatic habitat disturbed during implementation: (ft) | | 15 | 5 | 18 |
| | d. If applicable, length of bank stabilized: (ft) | | 0 | 0 | 0 |
| Feature | 2. Structural condition: Excl, Good, Fair, Poor, Fail | | EXCL | FAIR | EXCL |
| | 3. Are problems with the feature visible? | | N | Y | N |
| | a. Type: ANC, BBB, CRF, MAT, SHF, STR, SWA, UND, UNS, WSH, OTH | | - | MAT, UNS | - |
| | 4. Was the feature placed in the approved location along the channel? | | Y | Y | N |
| | 5. Was the feature placed in the approved position? | | Y | Y | Y |
| | a. Position: LBK, MDC, RBK, SPN, OTH | | LBK | RBK | LBK |
| | 6. Was the feature oriented as approved? | | Y | N | Y |
| | a. Orientation: DNS, MUL, PRL, PRP, UPS, OTH | | MUL | PRP | MUL |
| | 7. Were approved materials used for the feature? | | Y | Y | Y |
| | a. Materials: CON, LWD, MTL, NTR, OFR, RTW, VEG, WOO, OTH | | LWD | LWD | LWD |
| | 8. Were the sizes of materials used the same as approved? | | Y | N | Y |
| | 9. Was the feature anchored as approved? | | Y | Y | Y |
| | a. Anchoring: BUR, CBL, REB, STK, TIE, NON, OTH | | CBL, REB | REB | CBL, REB |
| Habitat | 10. If applicable, was the approved bank or channel excavation carried out? | | A | A | A |
| | 11. Were approved erosion control measures applied to disturbed areas? | | A | A | A |
| | a. Type: FAB, NTR, NTM, OFR, PLN*, SEE, SLF, STM, OTH | | - | - | - |
| Habitat | 12. If applicable, was the habitat type modification completed as approved? | | A | Y | A |
| | a. Habitat created: FLT, POO, RIF, OTH | | - | POO | - |
| | 13. If applicable, was gravel added to the stream as approved? | | A | A | A |
| Bank | a. Volume of gravel added to stream: (cy) | | - | - | - |
| | 14. If applicable, was the bank constructed to the approved angle? | | A | A | A |
| Implementation | a. As-built bank angle: (degrees) | | - | - | - |
| | 15. Does the feature meet design, contract & permit specifications? | | Y | Y | N |
| | a. If not, were modifications beneficial to performance? | | A | A | N |
| | b. Is non-compliance significant enough to jeopardize performance? | | A | A | D |
| | c. Are corrections needed? | | A | A | N |
| Implementation | 16. Would a different treatment or design have been preferable? If Y, comment | | N | N | N |
| | 17. Feature Implementation Rating: (Excl, Good, Fair, Poor, Fail) | | EXCL | FAIR | GOOD |
| Comments | Very nice feature. 3 LWD, good anchoring. | | | | |
| | LWD too small. 1 LWD, high angle intended for scour. | | | | |
| Comments | Placed feature in different location that agreed upon. | | | | |
| | | | | | |

*For revegetation use RT, for bioengineering use SB checklists. Y=Yes, N=No, P=Partially, D=Don't know, A=Not Applicable. CRMEP 08/05/08 Draft



Photo Description Form

Photo monitoring is also completed for pre and post-treatment effectiveness monitoring. All photo location data is clearly described and marked with tags in the field so that pre and post photos can be compared.

| PHOTO DESCRIPTION FORM | | | | | Page 01 of 02 |
|--|---------------------------|------------------------------------|--|---------------------------------------|--|
| Grant #: P0710503 | | | Project title: Redwood Crk Salmonid Habitat Improvement Project | | |
| Site ID: 7208074 | | Date: 8/10/09 | Photographer: FNC | | |
| Camera ID: Eval Canon | | Digital photo: Frame # prefix: IMG | | File type: JPG | |
| Compass: <input type="checkbox"/> True North or <input checked="" type="checkbox"/> Magnetic North Purpose of photos: Post-Treatment | | | | | |
| Frame # | Photo taken | | Location of photographer | Direction Facing: | Scene Description |
| | at photo-point? | of project feature? | Standing: | * | Looking at: |
| 3953-3954 | — | 1 | MDC 30' DNS of dam structure | UPS | Partially removed dam structure, match to pre 985-986 |
| 3955-3956 | — | 2 | RBK 110' UPS of dam structure base of hazelnut tree | LBK | F 2, 2 piece LWD structure on LBK, match to pre 383 |
| 3957-3959 | — | 3 | RBK directly across channel from F03 | LBK | F3, single log structure LBK, match to pre 384 |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| enter # given by camera | enter PP##, if applicable | enter feature (#), if applicable | Describe where the photographer was standing if photo is not taken from a photopoint OR provide additional relocation information. | N/W/SE, AZ°, UPS, DNS, LBK, RBK, etc. | "Looking at" - describe feature or subject, position of subject (cntr, top, btm, side), notable landmarks, points of special interest, etc. as applicable. |

* If photo is taken at the photopoint, include azimuth (°) in Direction Facing column. CRMEP 08/05/08 Draft

Onsite Navigation Form

The onsite navigation form is used record location data for features within the project (either by distance from a reference point by taking a waypoint). Location data, waypoint descriptions, and narrative directions are also recorded for reference points and photo points.

| ONSITE NAVIGATION FORM for <u>Pre-Treatment</u> | | | | | | | | Page 1 of 2 | | | |
|--|------------------------|--|-----|--|---|----------------------------------|----------------------------------|---------------------------------|--|----------------------|--|
| Grant #: P0710503 | | | | Project title: Redwood Crk Salmonid Habitat Improvement Project | | | | | | | |
| Site ID: 7208074 | | | | Date: 7/28/08 | | Evaluation crew: FNC, NPV | | | | | |
| Compass Type: <input type="checkbox"/> True North or <input checked="" type="checkbox"/> Magnetic North | | | | | | | | GPS Unit ID: Eval Garmin | | Datum: NAD 83 | |
| Point OR Feature? | | Description of Point or Feature | | Directions to Point or Feature | | | | | | | |
| | | | | <i>From</i> | | <i>Go</i> | | | | | |
| Point name (LL # #) | Project Feature (#) | Description of point or feature (include Lat/Long and/or waypoint) | WP | Reference Point | Distance to point/feature (ft or mi) | Direction to point or feature | Narrative Directions (if needed) | | | | |
| RP01 | 1 | RP01 is existing dam structure, F01 is partial dam removal and LWD placement on portion to be left | — | RP01 | 0 | UPS | — | | | | |
| — | 2 | F02 Multiple log structure (2) on LBK | — | RP01 | 110 | UPS | — | | | | |
| — | 3 | F03 Single log structure on LBK | 113 | RP01 | 190 | UPS | — | | | | |
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Point Names: **RP** Reference Point, **PC** Project Coordinate, **PP** Photo Point, **SA** Site Attribute, **NP** Navigation Point, **DP** Departure Point, **BS** Begin Survey, **ES** End Survey, **BA** Begin Access, **EA** End Access, **SR** Sample Reach, **EF** Electro Fish Reach, **TL** T

Maps and Waypoints

Maps are created for a project every time GPS data is collected. Important information such as parking and individual feature locations are then stored in the file and easily accessible when returning to the project at a later date. GPS points are downloaded, labeled, and copied into Word to be saved. Waypoint location data (latitude and longitude) is also included for every project that GPS data was collected.